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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/646,323

08/22/2003

Mark Smolenski

00601-0044US

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7590

06/30/2006

WOOD, PHILLIPS, KATZ, CLARK & MORTIMER
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EXAMINER

RODRIGUEZ, RUTH C

ART UNIT

PAPER NUMBER

3677

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/646,323

Applicant(s)

SMOLENSKI ET AL.

Examiner

Ruth C. Rodriguez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27, 29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-20, 22 and 30 is/are allowed.
- 6) ☒ Claim(s) 21, 23, 24, 26, 27 and 29 is/are rejected.
- 7) ☐ Claim(s) 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 21, 23, 24, 26 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosler (US 4,046,279).

A method of joining first and second tubular elements (1,2) comprises the steps of: a) providing a first tubular element (1) having a first axis, a first portion with a radially outwardly facing surface and a first connecting assembly (3); b) providing a second tubular element (2) having a second axis, a second portion with a radially inwardly facing surface, and a second connecting assembly (9); c) aligning the first and second tubular elements in a preassembly state with the first and second axes substantially coincident and the first portion adjacent to the second portion (having the projection 9 beginning to enter the guide groove 3); d) relatively axially moving the first and second tubular elements from the preassembly state towards each other into a first relative axial position and with the first and second tubular elements in the first relative axial position, relatively moving the first and second tubular elements around the first and second axes from a first relative rotational position into a second relative rotational position and thereby causing the first and second connecting assemblies to cooperate so as to draw

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the first and second portions axially towards each other where the first and second tubular elements in a second relative axial position (by moving the projection 9 along the guide groove 3 until it reaches a slot 4), wherein the radially inwardly and outwardly facing surfaces are configured so that a frictional force generated between the radially inwardly and outwardly facing surfaces on the first and the second portions is greater than with the first and second tubular elements in the first relative axial position (by having one or two projections being engaged) (C. 2, L. 53-68 and C. 3, L. 1-9). The step of causing the first and second connecting assemblies to cooperate comprises causing the first and second connecting assemblies to cooperate to releasably block the first and second tubular elements in the second relative rotational position (Figs. 8); and e) relatively axially moving the first and second tubular elements from the preassembly state towards each other into a third relative axial position that is different than the first relative axial position (further insertion of the inner tubular member into the outer tubular member). The first and second tubular elements in the third relative axial position, relatively rotating the first and second tubular elements into a third relative rotational position where a frictional force generated between the radially inwardly and outwardly facing surfaces is different that a frictional force generated between the radially inwardly and outwardly facing surfaces resulting from the tubular elements changing from the first relative axial position and first relative rotational position into the second relatively rotation position (by having three projection being engaged).

The step of causing the first and second connecting assemblies to cooperate comprises causing a projection (9) on one of the first and second connecting

assemblies to move in a groove (3) with an axial rise on the other of the first and second connecting assemblies as an incident of the first and second tubular element being relatively rotated (Figs. 1 and 8).

The step of causing the first and second connecting assemblies to cooperate causing a plurality of axially spaced projection to interact one each with a plurality of grooves each with an axial rise (Fig. 8).

At least one of the radially inwardly and outwardly facing surfaces is tapered (end 19 shown in figure 8) so as to thereby cause the frictional force between the radially inwardly and outwardly facing surfaces to be greater with the first and second tubular elements in the second relative axial position than with the first and second tubular elements in the first axial position (in conjunction with having all three projections being engaged).

Regarding claim 26, claim 26 is rejected based on a combination of the limitations of claims 21 and 29 that will yield the same limitations as claim 29.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosler in view of Finch (US 2,673,751).

Rosler teaches in combination a first tubular element (1) and a second tubular element (2). The first tubular element has a first axis, a first portion with a radially outwardly facing surface and a first connecting assembly (3a,4) at a first circumferentially facing surface. The second tubular element has a second portion with a second axis, a radially inwardly facing surface and a second connecting assembly (9) with a second circumferentially facing surface. The first portion extends within the second portion so that the radially inwardly facing surface on the second tubular element surrounds the radially outwardly facing surface on the first tubular element (Figs. 1-3). The first and second tubular elements positionable in a first relative axial position wherein relative movement of the first and second tubular elements around the first and second axes between a first relative rotational position (having the projection 9 beginning to enter the guide groove 3a) and a second relative rotational position causes the first and second connecting assemblies to cooperate to draw the first and second portions axially towards each other (Fig. 8). The first and second connecting assemblies cooperating so that the first and second circumferentially facing surfaces confront each other with the first and second tubular elements in the second relative rotational position to thereby block relative movement of the first and second tubular elements from the second relative rotational position back into the first relative rotational position (Fig. 8). One of the first and second connecting assemblies comprises a first radially inwardly extending projection and the other of the first and second assemblies

has a groove with a substantially uniform width in which the first projection guidingly moves as the first and second tubular elements are changed between the first and second relative rotational positions. The first radially inwardly projection has a circular shape with a length extending circumferentially relative to one of the first and second connecting assemblies. Rosler fails to disclose that the projection is outwardly facing and that it has an elongated shape where a narrower width is provided along the first and second axes. However, Finch teaches in combination a first tubular element (22) and a second tubular element (30). The first tubular element has a first axis, a first portion and a radially outwardly facing surface and a first connecting assembly (42) at a first circumferentially facing surface. The second tubular element has a second axis, a second portion and a radially inwardly facing surface and a second connecting assembly (36) at a second circumferentially facing surface. The first portion is extendable with the second portion so that the radially inwardly facing surface on the second tubular element surrounds the radially outwardly facing surface on the first tubular element (Figs. 2 and 3). The first and second tubular elements are positionable in a first relative axial position wherein relative movement of the first and second tubular elements around the first and second axes between (a) a first relative rotational position and (b) a second relative rotational position cause the first and second connecting assemblies to cooperate to draw the first and second portions axially towards each other (Figs. 2 and 3 and Paragraph 0020). The first and second connecting assemblies cooperate so that the first and second circumferentially facing surfaces confront each other with the first and second tubular elements in the second relative rotational position

(Figs. 2 and 3 and Paragraph 0020). The first and second tubular elements are positionable in a second relative axial position wherein relative movement of the first and second tubular elements from the first relative rotational position into the second relative rotational position causes the first and second connecting assemblies to draw the first and second portions axially towards each other further than with the first and second elements in the first relative axial position and the first and second tubular elements moved from the first relative rotational position into the second relative rotational position (Figs. 2 and 3 and Paragraph 0020). The radially outwardly facing surface on the first tubular element and radially inwardly facing surface on the second tubular element are relatively dimensioned and at least one of the radially inwardly facing surface and the radially outwardly facing surface is tapered so that by reason of the tapering the radially outwardly facing surface and radially inwardly surface are urged against each other with a frictional force that is greater with the first and second tubular elements in the second relative rotational position than with the first and second tubular elements in the first relative rotational position (as all the projection are engaged) (Figs. 2 and 3 and Paragraph 0020). Therefore, it would have been obvious to one having ordinary skill in the art at the time of Applicant's invention to have an first outwardly extending projection taught by Finch instead of the first inwardly extending projection disclosed by Rosler since the use of outwardly extending projection for an assembly is well known in the art and the reversal of components in a prior art reference, where there is no disclosed significance to such reversal, is a design consideration within the skill of the art. In re Gazda, 219 F.2d 449, 104 USPQ 400 (CCPA 1955); In re Japikse,

181 F.2d 1019, 86 USPQ 70 (CCPA 1950). Regarding to the elongate shape, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have an elongated shape where a narrower width is provided along the first and second axes as taught by Rosler since the use of elongated projection for an assembly is known in the art and a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Allowable Subject Matter

5. Claims 1-20, 22 and 30 are allowed.
6. Claim 25 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to claims 21 and 23-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gilbert (US 1,951,754), Pietro (US 4,911,573), Haynes (US 6,447,021 B1) and Ray et al. (US 6,811,190 B1) are cited to show state of the art with respect to telescoping mechanism having a connection means similar to the one being claimed by the current application.

Nishimura et al. (US 5,926,910) and Vesser (US 6,108,865) are cited to show state of the art with respect to fluid blower having a connection means similar to the one being claimed by the current application. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C. Rodriguez whose telephone number is (571) 272-7070. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075.

Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-6640.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

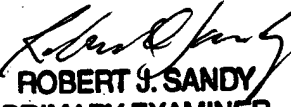
For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Ruth C. Rodriguez
Patent Examiner
Art Unit 3677

rcr
June 26, 2006


ROBERT J. SANDY
PRIMARY EXAMINER